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BRIEFING ON ALBION-SHERIDAN TOWNSHIP LANDFILL PROPOSED PLAN

I. SITE HISTORY

* 18 acre landfill 1 mile east of Albion, MI, operated 1961 to 1981. Accepted household wastes, metal plating and paint sludges, some drummed waste

* Listed on NPL in 1989

* 40 drums removed from surface of landfill in 1990, a few contained characteristically hazardous wastes

* Chosen as a Municipal Landfill Presumptive Remedy pilot in 1991 (State complained that industrial contribution too large for this approach)

II. SITE CHARACTERISTICS

RI conducted 1992-1994. Maybe 10-20% cheaper to EPA due to Presumptive Remedy approach. Length extended several months by disputes with State over whether to test pit and extent of groundwater investigation.

Landfill

* Up to 35 ft thick, mostly dry, contains low levels of VOCs, pesticides, PCBs at low levels. Arsenic present near background soil levels. Small amount of leachate contains benzene, nickel, vinyl chloride above MCLs. No risk calculations done.

* MDNR test pitting ($160,000 worth) disclosed 200 intact drums in one area, some containing characteristic hazardous waste

Groundwater

* Only arsenic at 1 location consistently exceeds MCLs (by ~ 2.5x). Source is at least partly the bedrock, which leaches arsenic under reducing conditions caused by landfill. About 5 other contaminants exceed Type B levels. Total risk is 2×10^{-3}

* Arsenic comes out of solution away from the landfill and reaches MCLs within 800 ft. It is not detected in nearby residential wells.

Soils, Surface Water, Sediments, Eco

* Spotty very low level contaminants detected. Very low health risk.

* No ecological effects to wetlands or other habitats and inhabitants detected.

III. PREFERRED REMEDY/ALTERNATIVES

Preferred Remedy

* Remove ~200 drums of hazardous or liquid wastes and others encountered during grading.

* Install a flexible membrane liner cap (intermediate between RCRA C & D) with active gas collection (unless passive meets ARARs).

* Groundwater monitoring with deed restrictions (if possible), with a contingency for in-situ treatment of arsenic (e.g. air sparging) to MCLs, to begin in 5 years if arsenic not decreasing at defined rate or sooner if residential wells threatened.

Alternatives See chart

Action	Capital	Annual O & M	Net Present Worth
Drum removal	0.61M	0	0.61M
Clay Cap	1.54M	8,800	1.67M
Enhanced Clay Cap	1.78M	8,800	1.91M
FML Cap	1.73M	8,800	1.86M
Passive Gas Collection	50,000	17,000	0.31M
Active Landfill Gas Collection	180,000	36,000	0.74M
Groundwater Monitoring	0.13	60,000	1.06M
In-situ to MCL + GWM	0.56M	140,000	1.85M
In-situ to Type B + GWM	0.86M	180,000	2.85M
Pump & Treat to Type B + GWM	0.93M	180,000	2.68M

IV. ISSUES/ENFORCEMENT STATUS

* The landfill cap will take over half of one resident's property (Mr/Mrs Prader) and the fenceline surrounding the landfill will be right at their house wall. They seem to be an "innocent landowner" PRP. ORC expects not to offer them any compensation. This doesn't seem right.

* State concurrence on ROD expected.

* Expected to be a PRP lead RD/RA (Corning, Cooper Industries major players). City of Albion is a PRP, but landfill was privately operated, so State cost share is 10%

V. SCHEDULE

ROD	January '95
RD/RA Negotiations	March to September '95
RD Start	March '96
RD Complete/RA Start	December '96
Construction	Spring '96